

Search EIA:

by 

Page Links


[Printer-Friendly Version](#), [PDF Version](#), [PDA Version](#)
[Background](#)[Oil](#)[Natural Gas](#)[Electric Power](#)[Profile](#)[Links](#)[Mailing Lists](#)**February 2001**

Peru

Peru represents a potentially expanding market for U.S. and other foreign energy companies, although privatization is proceeding more slowly than in the 1990s. Although Peru's huge Camisea natural gas field project is temporarily on hold, it has great potential.

Note: Information in this report is the best available as of February 2001 and can change.



GENERAL BACKGROUND

Peru currently is in the midst of a transition period following the ouster by Congress in November 2000 of former President Fujimori. This followed Fujimori's announcement in September 2000 that he would hold new elections and step down as President in July 2001. Peru currently is being run by a caretaker government led by President Valentin Paniagua, who is seeking to cut spending and to restore confidence after a tumultuous period in Peru's history.

Peru's economy has weathered recent global economic difficulties better than many of its neighbors. In the wake of the Asian financial crisis, many of Peru's Latin American neighbors experienced economic downturns. Throughout the 1990s, Peru maintained relatively positive economic indicators, such as gross domestic product (GDP) growth, despite fallout from the Asian financial crisis, El Nino weather-related problems, and low prices for mining exports, a major revenue source for Peru. GDP growth for 2001 is forecast at a relatively low 1.5%, down from 3.6% growth in

2000. The fiscal deficit, running at nearly 3% of GDP -- and well above the International Monetary Fund (IMF) target of 2.1% -- remains a major challenge for Peru. Other problems include: high interest rates and a credit crunch; stagnating foreign investment; continuing political (and economic) instability leading up to April 2001 Presidential elections; high levels (around \$27.5 billion -- half of Peru's GDP) of private and public sector debt; rampant poverty; and underemployment. Inflation, on the other hand, remains low, due to tight fiscal and monetary policies, high unemployment, depressed domestic demand, and a relatively stable exchange rate for the country's currency, the Nuevo sol. Another positive upcoming development will be the opening of the huge Antamina copper-zinc mine in 2002, which should provide a boost to Peru's export earnings.

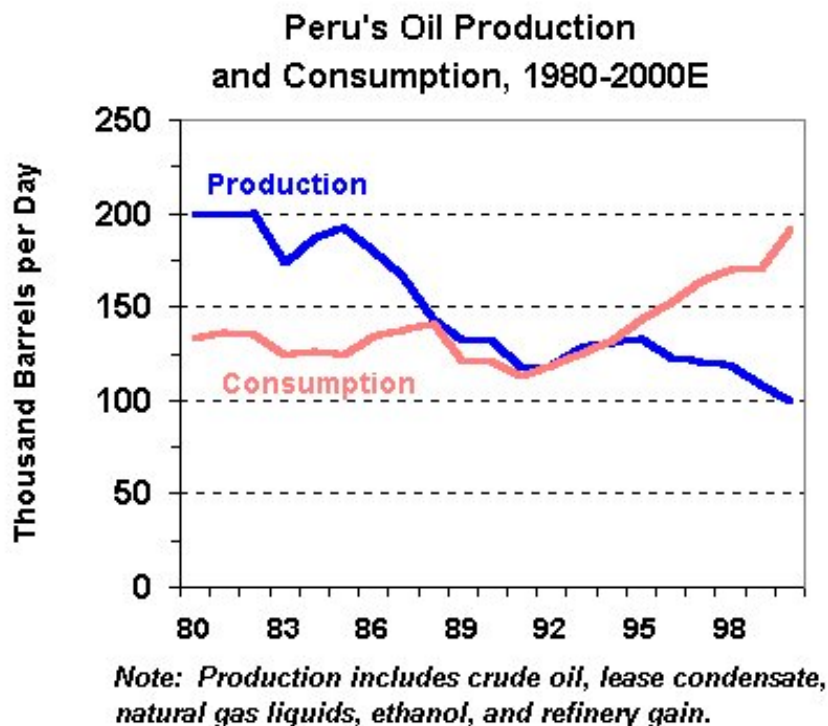
Peru's privatization program has slowed recently after a decade of liberalization. Prior to the Presidential elections of April 2000, for instance, former President Fujimori had decided against selling state refineries, hydroelectricity plants, and water companies. Interim President Paniagua's government reportedly is reevaluating the country's privatization program, although a final decision likely will be left for the next government, which is slated to take office in July 2001. Up until September 2000, Peru appeared to have raised only \$300 million from privatizations, less than half the \$650 million goal for the year.

Peru is a member of the Andean Community (ANCOM), set up in March 1996 by leaders of Bolivia, Colombia, Ecuador, Peru, and Venezuela. At that time, the five national leaders expressed their intent to move towards a single market along the lines of the European Union, although significant policy differences need to be worked out. In November 1997, Peru joined the Asia Pacific Economic Cooperation (APEC) forum.

Peru and neighboring Ecuador have fought over a disputed 50-mile stretch of highland jungle in the Cordillera del Condor region along Peru's northeastern border 3 times in the last 47 years, most recently in 1995, when 19 days of fighting left hundreds of casualties. The two nations almost went to war a fourth time in August of 1998, but pulled back and negotiated a border settlement and peace treaty -- brokered by the United States, Brazil, Argentina and Chile -- in October 1998. In August 1999, the countries signed bilateral agreements to build bridges and roads between the neighbors.

OIL

Peru's crude oil production fell sharply in the late 1980s and early 1990s, before a modest recovery beginning in 1993. In the late 1990s, however, Peru's oil production began falling once again (see graph), and as consumption has risen rapidly, Peru has become a significant net oil importer. In 2000, oil production was 100,000 barrels per day (bbl/d), down from 106,000 bbl/d in 1999 and 119,000 bbl/d in 1998. The majority of Peru's oil is produced by Argentina's Pluspetrol, which operates Block 1-AB on the border with Ecuador, and which acquired Occidental Petroleum's 100% interest in this block at the beginning of 2000. Peru's state company Perupetro, U.S.-based Petro-Tech, and U.S.-based Barrett Resources Corporation account for most of the remaining production. Peru estimates that it needs drilling investments of more than \$100 million per year over the next five years in order to maintain its proven oil reserves.



Perupetro's predecessor, Petroperu, was partially privatized in 1993 and its role as negotiator and supervisor of contracts was assumed by Perupetro. The main areas of current and potential oil activity are in the northern jungle as well as some offshore areas located from the northern city of Tumbes to Pisco, south of Lima. In September 2000, the Peruvian government declared the Candamo Valley, the world's last uninhabited jungle region, but which is believed to contain oil reserves, a biological sanctuary. In 1996, Mobil Oil had been authorized to set up drilling operations in Candamo.

Peru's 37 million acres of offshore basins are largely unexplored. Most of Peru's ten coastal basins are entirely offshore, but at both ends of the 1,500-mile coastline the sedimentary basins stretch from onshore across the continental shelf and down the continental slope. Two of these basin areas, in the north, have commercial production. The main basins are the Tumbes-Prugreso basin in the north at the Ecuadorean border, the Talara basin just south of Tumbes, and the Mollendo-Moquegua basin in the south. In the northern jungle area of Marañon and Ucayali basins, YPF and Perez Companc signed exploration contracts in 1998. Three bidding rounds are tentatively scheduled for 2001, with Blocks Z-4, Z-5, Z-6, and Z-7 off Peru's north coast to be included in the first round. A second bidding round is slated to consist of blocks in the Slaverri basin off Trujillo, and a third bidding round is scheduled for late 2001 for blocks off Peru's southern coast.

Oil exploration efforts in Peru ran into problems in 1999. Shortly before an August 1999 bidding round was to begin, Repsol revealed that it had drilled two dry wells in Block Z-29 offshore in the Trujillo Basin (in July 2000, Repsol returned the block to Perupetro). The U.S. company Anadarko withdrew from Peru after spending three years exploring its Block 84. Pan Energy Exploration, associated with Peruvian companies, withdrew from Block 85 after drilling dry wells. Coastal Peru, which was a partnership including the U.S.-based Hunt Corporation, is no longer operating after three test wells failed to produce any oil.

Pipeline

Peru's Norperuano pipeline runs from the Amazon to the Pacific Ocean. While the pipeline has a capacity of 200,000 bbl/d, it currently carries only about 80,000 bbl/d of crude oil, mostly for domestic consumption. The settlement of the Ecuador-Peru border dispute has led to the possibility of Ecuador exporting crude from its southern borders area through Peru's pipeline. In May 1999, the pipeline was ruptured by a mudslide but was quickly repaired and resumed normal operations.

Refining

Peru has five main active refineries. The largest, La Pampilla, with a capacity of 100,000 bbl/d, underwent a 60% privatization in 1996 and is controlled by Repsol and others. It handles over half the total production of refined products. Petroperu owns the other major refineries: the 62,000 bbl/d-capacity (about 35% of total production) Talara refinery, located in the region of Piura on Peru's northwest coast, as well as the Iquitos Loreto (10,500 bbl/d) refinery in the northeast, the Conchan refinery (6,500 bbl/d), and the Pucallpa refinery (3,250 bbl/d). The state-owned refineries had been slated to be privatized in the late 1990s. Despite considerable interest from international companies, privatization of the refineries has been put on hold at least until a new government takes power in July 2001.

NATURAL GAS

In July 1998, a consortium of Shell and Mobil halted development of the giant Camisea natural gas field, the largest in South America, which contains an estimated 9-13 trillion cubic feet (Tcf) of gas and over 600 million barrels of condensate. Camisea gas reserves are found in two reservoirs, San Martin and Cashiriari, lying on either side of the Camisea River in the Ucayali basin, in the remote jungle east of the Andes, about 300 miles from Lima. Development of Camisea has been delayed numerous times, largely for political reasons, in the past few years. In December 2000, the Peruvian Ministry of Mines and Energy said that it hoped that contracts could be signed soon on development of Camisea.

The \$2.6-billion Camisea project has been split into a 40-year contract covering exploration and production, and a 33-year contract dealing with transportation and distribution. On October 20, 2000, Peru issued a tender for this latter part of the Camisea project, which includes separate pipelines for gas and liquids. The sole bidder was a six-company consortium led by Argentina's Tegas, and including Pluspetrol (Argentina), Hunt Oil (US), Grana y Montero (Peru), Sonatrach (Algeria), and SK Corp. (Korea). On February 16, 2000, a consortium led by Argentina's Pluspetrol (and including Hunt Oil and the SK Corp.) had won the bidding for upstream work on Camisea. Overall, Camisea is expected to generate \$5-\$6 billion in royalties and tax revenues for Peru over the next 30+ years. Gas from Camisea is slated to fuel power plants in Lima and north-central Peru. Power generators and large industrial customers are considered the largest potential customers for Camisea gas.

Shell had estimated that Camisea eventually could produce up to 500 million cubic feet per day (MMcf/d) of gas and 50,000 bbl/d of condensate. Gas and condensate were to be transported across the Andes to Lima (via Pisco on the southern coast) by at least two parallel pipelines. In the Pisco area, the fish industry and an iron-carbide plant represented potential customers. In Lima, the cement industry would have been the largest customer; Lima's private electric generating company Etevensa also promised to be a customer for the Camisea gas. The gas would have been used in Etevensa's 480-megawatt (MW) power plant (the country's largest) at Ventanilla, just north of Lima. Besides field development, development of Camisea would have involved construction of a private 300-MW power plant to serve Peru's central northern grid and the south. Customers were planned to include large

mining companies, utilities, and cement manufacturers. It had been hoped that Camisea could have made up to \$1 billion a year and attract billions of dollars worth of new industry to Peru.

The Aguaytia natural gas project was the first development initiated under the current hydrocarbons law. The project has produced 55 MMcf/d since it came onstream in June 1998. Gas from Aguaytia fires a 160-MW power plant that feeds Peru's North Interconnected Power grid. It also produces about 1,300 bbl/d of liquefied petroleum gas and 2,500 bbl/d of natural gasoline. Aguaytia could increase production from its estimated 440-billion cubic feet (Bcf) reserves, but it remains unclear whether Peruvian electricity demands will warrant an increase. Furthermore, the unresolved future of the Camisea project is relevant to Aguaytia. The project is operated by an independent management team, and companies with shares in the project include Maple Gas Corporation, Duke Energy International, El Paso Energy International Company, Illinova Generating Company, Power Markets Development Company, and Scudder Latin America Power Fund.

ELECTRIC POWER

Peru has about 5.5 million kilowatts of installed electric generation capacity. About half of Peru's power production capacity in 1999 was hydroelectric, with thermal plants fired by diesel, fuel oil and coal supplying the remainder. Construction of a new 525-megawatt (MW) hydroelectric plant at Cheves, north of Lima, is under consideration. Also, the 140-MW Chimay hydropower plant is scheduled for completion at some point in 2001. The rate of electrification in Peru remains low (under three-fourths), with much room for growth. In addition, power demand is growing rapidly. Due to the country's diverse geographical characteristics and scattered population centers, the nation is composed of two interconnected systems and several smaller isolated systems. A new north-south transmission line (Mantaro-Socabaya) unified Peru's central-north (COES-SICN) and southern (SIS) grids in 2000. In December 2000, the Inter-American Development Bank (IDB) approved a loan of up to \$53 million to help upgrade the power transmission and distribution system of southern Peru.

Much of Peru's electric sector remains in the hands of the government, including the electric tariff commission (CTE). Many utilities are wholly- or partially-state-owned, including ElectroPeru, Electrica del Sur, Egasa, and Edegel. Mining and industrial self generators and private companies also generate electricity. Much of the focus of Fujimori's overall privatization plans has been on the electricity sector, and price subsidies to electricity consumers have been reduced in recent years. In 1992, an Electricity Concessions Law was passed, which allowed for private generation, transmission, and distribution of electricity in Peru. The state utility ElectroLima and most of ElectroPeru's assets were privatized in the wake of the law. In November 1997, Peru's Congress approved legislation limiting firms to a 15% market share in electricity generation, transmission or distribution. The law also allows the government to block any acquisition giving a private company more than a 5% market share in more than one electric power sector. Finally, the legislation gives Peru's government the right to veto any acquisitions deemed contrary to the "national interest." About 80% of generation capacity and 50% of distribution now is handled by private companies.

The pace of power privatization in 1999 and 2000 was slower than expected, as President Fujimori decided to retain government control over key hydroelectric plants. This includes the 1,200-MW Mantaro hydro plant, which supplies 35% of Peru's electricity. Ownership of Mantaro likely will be transferred to the country's public pension fund (Fonahpu), possibly making privatization less likely. Also, in 1999 the Peruvian government announced that privatization plans for the 100-MW Macchu Picchu hydro plant, Egemsa, and the 110-MW San Gaban project, both would be scrapped. Any decisions on new power privatizations likely will not be made until after a new government takes power in July 2001.

In December 2000, Peru's Ministry of Mines and Energy announced that the government would lift restrictions on new hydroelectric power projects. Peru's Congress had approved a law in December 1999 which suspended construction of hydro plants for five years. The aim of the law was to favor development of thermal power plants which would use natural gas from the Camisea field.

International companies involved in Peru include: Entergy, Duke Energy, Sempra Energy International, Endesa, Chilectra, Banco Santander, and Tractebel. U.S. companies have had mixed results in their involvement in Peru. Duke Energy gained a controlling share of Egenor in the fall of 1999. Sempra Energy International and PSEG Global attempted to win greater shares of Luz del Sur after their acquisition of Chile's Chilquinta gave them Chilquinta's 37% stake in Luz del Sur, but the companies ran into unexpected obstacles that prevented any deal.

Sources for this report include: The Banker; Business Wire; Chemical Business Newbase; CIA World Factbook 2000; Dow Jones; Economist Intelligence Unit ViewsWire; Electric Utility Week International; Energy Day; Financial Times; International Water Power and Dam Construction; Interpress Service; Latin America Monitor; Oil

and Gas Journal; Oil Daily; Petroleum Economist; International Market Insight Reports; McGraw-Hill Companies, Global Power Report; Reuters English News Service; U.S. Energy Information Administration; Wall Street Journal; WEFA Latin America Economic Outlook; Xinhua News Agency.

COUNTRY OVERVIEW

President: Valentin Paniagua Corazao (interim; next election April 2001)

Prime Minister: Javier Perez de Cuellar

Independence: July 28, 1821 (from Spain)

Population (7/00E): 27.0 million

Location/Size: Western South America, between Chile and Ecuador; 796,836 square miles (slightly smaller than Alaska)

Major Cities: Lima (capital)

Languages: Spanish (official); Quechua (official); Aymara

Ethnic Groups: Indian (45%); mestizo (37%); white (15%); black, Japanese, Chinese, and other (3%)

Religions: Roman Catholic

Defense (8/98): Army (85,000), Navy (25,000), Air Force (15,000), Paramilitary Police (78,000)

ECONOMIC OVERVIEW

Economy and Finance Minister: Javier Silva Rute

Currency: 1 Nuevo sol (Ns) = 100 centimos

Market Exchange Rate (2/12/01): US\$1 = NS 3.53

Gross Domestic Product (2000E): \$54.0 billion

Real GDP Growth Rate (2000E): 3.6% **(2001F):** 1.5%

Inflation Rate (consumer prices, 2000E): 3.8%

Current Account Balance (2000E): -\$1.7 billion

Major Export Products (1999E): Gold, copper, fish and fish products, textiles, zinc

Major Import Products (1999E): Intermediate goods; capital goods; consumer goods (32%)

Major Trading Partners (1999): United States, Japan, Germany, other Latin America (Brazil, Colombia, Chile, etc.)

Foreign Exchange Reserves (non-gold; 2000E): \$8.5 billion

Total Foreign Debt (2000E): \$31.2 billion

ENERGY OVERVIEW

Energy and Mines Minister: Carlos Herrera

Proven Oil Reserves (1/1/01): 310 million barrels

Oil Production (2000E): 100,000 barrels per day (bbl/d), of which 97,000 bbl/d was crude oil

Oil Consumption (2000E): 192,000 bbl/d

Net Oil Imports (2000E): 92,000 bbl/d

Crude Oil Refining Capacity (1/1/01): 182,250 bbl/d

Natural Gas Reserves (1/1/01): 8.7 trillion cubic feet (Tcf)

Natural Gas Production (1999E): 14.8 billion cubic feet (Bcf)

Natural Gas Consumption (1999E): 14.8 Bcf

Recoverable Coal Reserves (12/31/96): 1.17 billion short tons

Coal Production (1999E): 23,000 short tons

Coal Consumption (1999E): 680,000 short tons

Electric Generation Capacity (1/1/99E): 5.5 million kilowatts (kw), of which 53% was thermal, 47% hydroelectric

Electricity Generation (1999E): 18.9 billion kilowatthours (kwh)

ENVIRONMENTAL OVERVIEW

Total Energy Consumption (1999E): 0.53 quadrillion Btu* (0.1% of world total energy consumption)

Energy-Related Carbon Emissions (1999E): 7.4 million metric tons of carbon (0.1% of world carbon emissions)

Per Capita Energy Consumption (1999E): 21.1 million Btu (vs. U.S. value of 355.9 million Btu)

Per Capita Carbon Emissions (1999E): 0.3 metric tons of carbon (vs. U.S. value of 5.6 metric tons of carbon)

Energy Intensity (1999E): 10,465 Btu/\$1990 (vs U.S. value of 12,638 Btu/\$1990)**

Carbon Intensity (1999E): 0.15 metric tons of carbon/thousand \$1990 (vs U.S. value of 0.20 metric tons/thousand \$1990)**

Sectoral Share of Energy Consumption (1997E): Industrial (39.3%), Residential (36.9%), Transportation (20.7%), Commercial (3.2%)

Sectoral Share of Carbon Emissions (1997E): Industrial (41.5%), Transportation (39.4%), Residential (15.0%), Commercial (4.1%)

Fuel Share of Energy Consumption (1999E): Oil (65.9%), Coal (3.3%), Natural Gas (2.6%)

Fuel Share of Carbon Emissions (1999E): Oil (90.0%), Coal (6.3%), Natural Gas (3.7%)

Renewable Energy Consumption (1997E): 314 trillion Btu* (3% increase from 1996)

Number of People per Motor Vehicle (1997): 8.2 (vs. U.S. value of 1.3)

Status in Climate Change Negotiations: Non-Annex I country under the United Nations Framework Convention on Climate Change (ratified June 7th, 1993). Signatory to the Kyoto Protocol (signed November 13th, 1998- not yet ratified).

Major Environmental Issues: Deforestation; overgrazing of the slopes of the cost and sierra leading to soil erosion; desertification; air pollution in Lima; pollution of rivers and coastal waters from municipal and mining wastes

Major International Environmental Agreements: A party to the Antarctic-Environmental Protocol, Antarctic Treaty, Biodiversity, Climate Change, Desertification, Endangered Species, Hazardous Wastes, Nuclear Test Ban, Ozone Layer Protection, Ship Pollution, Tropical Timber 83, Tropical Timber 94, Wetlands and Whaling

* The total energy consumption statistic includes petroleum, dry natural gas, coal, net hydro, nuclear, geothermal, solar and wind electric power. The renewable energy consumption statistic is based on International Energy Agency (IEA) data and includes hydropower, solar, wind, tide, geothermal, solid biomass and animal products, biomass gas and liquids, industrial and municipal wastes. Sectoral shares of energy consumption and carbon emissions are also based on IEA data.

**GDP based on EIA International Energy Annual 1998

OIL AND GAS INDUSTRIES

Organization: Perupetro, which started operating in 1993, is the state company responsible for overall regulation and licensing of the country's oil and gas industries. Perupetro also negotiates oil and gas contracts with companies to explore and/or produce in Peru. Petroperu is the state oil company and Electroperu is the state electric power company. Regional state-owned electric companies Egenor (for the north of Peru) and Egesur (for the south), as well as state mining company Centromin, are also slated for privatization.

Ports: Callao, Chimbote, Ilo, Iquitos, Matarani, Paita, Pucallpa, Salaverry, San Martin, Talara, Yurimaguas

Major Natural Gas Field: Camisea

Foreign Energy Company Involvement: Barrett Resources, Coastal, Duke Energy, Elf Aquitaine, Enterprise Oil, ExxonMobil, Hanwha Energy, Hunt Oil, Hyundai, Korean Petroleum Development Corp., Maple Gas, Mosbacher Energy, Occidental Petroleum, Pangaea Peru Energy, Perez Companc, Petro-Tech, Phillips Petroleum, Pluspetrol, Quintana Minerals, Repsol, Shell, SK Corp., Sonatrach

Pipelines: 500 miles for crude oil; 40 miles for natural gas

Refineries (crude oil capacity): La Pampilla Lima (100,000 bbl/d); Talara (62,000 bbl/d); Iquitos Loreto (10,500 bbl/d); Conchan (6,500 bbl/d); Pucallpa (3,250 bbl/d)

Links

For more information from EIA on Peru, please see:

[EIA - Country Information on Peru](#)

Links to other U.S. government sites:

[CIA World Factbook - Peru](#)

[U.S. Department of Energy's Office of Fossil Energy's International section - Peru](#)

[U.S. State Department Background Notes on Peru](#)

[U.S. State Department Consular Information Sheet on Peru](#)

[U.S. Trade and Development Agency - Latin America and the Caribbean](#)

The following links are provided solely as a service to our customers and should not be construed as advocating or reflecting any position of the Energy Information Administration (EIA) or the United States Government. EIA does not guarantee the content or accuracy of any information presented in linked sites.

[Peru's Ministry of Energy and Mines Home Page](#) (in Spanish)

[Petroperu Home Page](#) (in Spanish)

[Perupetro Camisea Project Page](#)

[Lonely Planet Guide: Peru](#)

[LANIC Peru Resources](#)

[Nuevo Peru Home Page](#) (in Spanish)

If you liked this Country Analysis Brief or any of our many other Country Analysis Briefs, you can be automatically notified via e-mail of updates. Simply click [here](#) and follow the instructions. You will then be notified within an hour of any updates to our Country Analysis Briefs.

File last modified: February 14, 2001

Contact:

Lowell Feld
lowell.feld@eia.doe.gov
Phone: (202) 586-9502
Fax: (202) 586-9753

URL: <http://www.eia.doe.gov/cabs/peru.html>

If you are having technical problems with this site, please contact the EIA Webmaster at wmaster@eia.doe.gov